

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-17 (canceled)

Claim 18 (new): A communication processing device comprising:
a communication unit for performing data communication with an external device;

a control unit, for searching communicable access points, generating communication settings information for each searched access point as pico-cell information, performing communication information acquisition processing for generating a mapping table which stores available address information which is set in said pico-cell information corresponding to a communication protocol applicable to communication as to each access point, setting an address conforming to the communication protocol based on said mapping table, and executing communication preparatory processing for performing communication status setting processing based on said pico-cell information; and

a memory unit for storing said mapping table and said pico-cell information.

Claim 19 (new): A communication processing device according to Claim 18, wherein said communication processing device has a configuration wherein parallel communication processing is performed as to different access points to which different communication protocols are applied, or different connection resources via the different access points, by parallel processing to which a plurality of different network protocol stacks in said control unit are applied.

Claim 20 (new): A communication processing device according to Claim 18, wherein said control unit has a configuration wherein a small-scale network is set such that said device itself is a master and one or more communicable access points are slaves, and resource information collection

processing regarding a resource connected by cable to the access point from one or more communicable access points set as slaves is performed, and processing to enter the collected resource information to said mapping table is executed.

Claim 21 (new): A communication processing device according to Claim 18, wherein said communication processing device performs wireless communication with Bluetooth communication;

and wherein said control unit executes processing for searching one or more communicable access points with inquiry packet transmission using broadcasting, setting a pico-net wherein an access point which transmits a response packet for a broadcast packet is a slave, performing service search processing using SDP (Service Discovery Protocol) as to one or more communicable access points set as slaves, and registering obtained resource information to said mapping table based on the service search processing.

Claim 22 (new): A communication processing device according to Claim 18, wherein said mapping table is a table which stores information for performing communication processing conforming to each communication protocol as a directory configuration, and includes an address information data file which stores address information required for communication to which each communication protocol is applied, and a resource information file which stores accessible resource information based on communication conforming to each communication protocol;

and wherein said control unit has a configuration wherein address and resource information is obtained from said mapping table, and processing to generate and send a data processing request packet in which a resource address is set as a destination address is performed based on the obtained resource information.

Claim 23 (new): A communication processing device according to Claim 18, wherein communication status setting processing based on said pico-cell

information processed by said control unit includes synchronization processing in a physical layer comprising a communication unit.

Claim 24 (new): A communication processing device according to Claim 18, wherein said control unit has a configuration wherein search processing for communicable access points is performed as transmission processing for a broadcast packet, and generating and updating processing for said pico-cell information is performed based on response transmission for the broadcast packet.

Claim 25 (new): A communication processing device according to Claim 18, wherein said control unit has a configuration wherein information including commands information applicable to resource address information and resources, as resource information regarding a resource connected by cable to an access point from one or more communicable access points is collected, and processing to enter the collected information to said mapping table is executed.

Claim 26 (new): A communication processing method for performing data communication as to an external device comprising:

searching communicable access points;

generating communication settings information for each searched access point as pico-cell information;

generating a mapping table to which available address information conforming to a communication protocol applicable to communication as to each access point set in said pico-cell information is stored; and

setting an address conforming to a communication protocol based on said mapping table, and performing communication status setting processing based on said pico-cell information.

Claim 27 (new): A communication processing method according to Claim 26, wherein said communication processing method further includes performing parallel communication processing which covers different access points

to which different communication protocols are applied, and different connection resources via the different access points, by parallel processing to which a plurality of different network protocol stacks are applied.

Claim 28 (new): A communication processing method according to Claim 26, wherein said communication processing method further includes setting a small-scale network wherein said device itself is a master and one or more communicable access points are slaves, and performing resource information collection processing regarding resources connected by cable to the access point from one or more communicable access points set as slaves, and performing processing to register the collected resource information to said mapping table.

Claim 29 (new): A communication processing method according to Claim 26, wherein wireless communication is carried out using Bluetooth communication, and wherein one or more communicable access points with inquiry packet transmission using broadcasting is searched, and a pico-net wherein the access points which transmit a response packet as to a broadcast packet are slaves is set;

further comprising Performing service search processing using SDP (Service Discovery Protocol) as to one or more communicable access points set as slaves, and performing processing to enter resource information obtained based on the service search processing to said mapping table.

Claim 30 (new): A communication processing method according to Claim 26, wherein said mapping table is a table which stores information for performing communication processing conformed to each communication protocol as a directory configuration, and includes an address information data file which stores address information required for communication to which each communication protocol is applied, and a resource information file which stores accessible resource information based on communication conforming to each communication protocol;

and wherein said communication processing method obtains address information and resource information from said mapping table, and generates and transmits data processing request packet on which a resource address is set as a destination address based on the obtained resource information.

Claim 31 (new): A communication processing method according to Claim 26, wherein communication status setting processing based on said pico-cell information includes synchronization processing in a physical layer comprising a communication unit.

Claim 32 (new): A communication processing method according to Claim 26, transmission processing is performed for a broadcast packet, and said pico-cell information generating step performs processing based on response transmission for the broadcast packet.

Claim 33 (new): A communication processing method according to Claim 26, wherein processing is included wherein information including commands information applicable to resource address information and resources, is collected as resource information regarding resources connected by cable to an access point from one or more communicable access points, and the collected information is registered to said mapping table.

Claim 34 (new): A computer program written for executing communication processing to perform data communication on a computer system as to an external device, said program comprising:

a search step for searching communicable access points;

a pico-cell information generating step for generating communication settings information for each searched access point as pico-cell information;

a mapping table generating step for generating a mapping table which stores available address information conforming to communication protocol applicable to communication as to each access point set in said pico-cell information; and

a communication preparatory step for setting an address conforming to a communication protocol based on said mapping table, and performing communication status setting processing based on said pico-cell information.